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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/982,753

Applicant(s)

BENTLEY ET AL.

Examiner

JEAN B. FLEURANTIN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 May 2005 has been entered.

2. Claims 1-16 and 21-24 remain pending for further examination.

### ***Response to Applicant' Remarks***

3. Applicant's arguments, filed 25 May 2005, with respect to 1-16 and 21-24 have been fully considered but are not persuasive. Please see the following rejections.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claim(s) is/are directed to a non-statutory subject matter, specifically, directed towards an abstract idea.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 Wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work Gottschalk v. Benson, 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker v. Flook, 197 USPQ 193, 201 (S Ct 1978). A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

Claim 1 represents an abstract idea that does not provide a practical application in the technological arts. There is no manipulation of data nor is there any transformation of data from one state to another state. Actually, no post-computer process activity is found in the technological arts. "A method of managing physical-file based data". Thus, no physical transformation is performed, no practical application is found. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the

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class configured in any manner to perform the underlying process. Consequently, the claims are analyzed based upon the underlying process, and are thus rejected as being directed to nonstatutory subject matter. And also dependent claims 2-16 are rejected under the same analysis.

### Examiner's Remarks

Applicant(s) is (are) advised to amend the claim(s) by specifying the claim(s) being directed to a practical applications and produce a tangible result being executed by a general purpose computer (to be executed by a computer) in order to correct the above indicated deficiencies.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-14, 16 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,339,247 issued to Kiriara et al., ("kiriara") and Applicant(s) Admitted Prior Art ("AAPA"); Specification pages 2-6 up to paragraph [0013].

As per claim 1, Kiriara discloses "a method wherein the physical-file-based data includes a physical file having a plurality of file elements" (i.e., parts construction table

contains a parts number field and a physical path name field; see Fig. 10, col. 7, lines 10-20), the method comprising the steps of:

(a) "representing physical file-based data as a plurality of individual components, each individual component having a unique identity and identifier (i.e., identifiers to uniquely identify the parts are made correspond to each other; see col. 2, lines 29-37); and

(b) "storing said individual components in a store" (i.e., stored into the distributed parts file of each client; see col. 4, lines 26-30). Kiriara fails to explicitly disclose managing physical-file-based data adapted to be manipulated by at least one user via a file-based computerized editor; and wherein said individual components are adapted to be manipulated by a transaction-based computerized editor. However, AAPA discloses traditional file-oriented programs are very efficient viewing and editing tools and are well known by many users (see AAPA page 4, paragraph [0009]) and various products have been developed to transcend the file-oriented model, while still allowing traditional tools to be applied at the viewing and editing stage (see AAPA page 5, paragraph [0011]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Kiriara with AAPA with managing physical-file-based data adapted to be manipulated by at least one user via a file-based computerized editor; and wherein said individual components are adapted to be manipulated by a transaction-based computerized editor. Such a modification would allow the teachings of Kiriara and AAPA to provide a management tool for tracking and managing multiple simultaneous changes to a project data set in a cohesive, secure,

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identifiable, and reversible way, and interfaces for importing data from, and for making changes to, the project data set with file-oriented tools such as CAD programs (see AAPA page 1, paragraph [0002]).

As per claim 2, Kiriara further discloses, "storing all of said individual components corresponding to one file of said file-based data in a single store" (see col. 7, lines 10-20), "wherein said single store, wherein single store contains no individual components of a different file of said file-based data" (see col. 5, lines 45-49).

As per claim 3, Kiriara further discloses "retrieving said components using a client comprising a private store" (see col. 5, lines 54-60), and "a run-time agent, wherein said run-time agent looks up a store's server, connects with said store's server, requests said components from said server, and stores a version of said components in said private store" (see col. 5, lines 51-61), and also see col. 6, lines 46-55, and the abstract.

As per claim 4, Kiriara further discloses "providing access to said retrieved components to external applications through said run-time agent" (see col. 3, lines 40-46).

As per claim 5, Kiriara substantially discloses the invention as claimed except recreating equivalent file-based data for use within an environment of a file-based

computerized editor from said individual components in said store. However, APA discloses traditional file-oriented programs are very efficient viewing and editing tools and are well known by many users (see AAPA page 4, paragraph [0009]) and various products have been developed to transcend the file-oriented model, while still allowing traditional tools to be applied at the viewing and editing stage (see AAPA page 5, paragraph [0011]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Kiriara and AAPA with recreating equivalent file-based data for use within an environment of a file-based computerized editor from said individual components in said store. Such a modification would allow to the teachings of Kiriara and AAPA to provide a management tool for tracking and managing multiple simultaneous changes to a project data set in a cohesive, secure, identifiable, and reversible way, and interfaces for importing data from, and for making changes to, the project data set with file-oriented tools such as CAD programs (see AAPA page 1, paragraph [0002]).

As per claim 8, Kiriara discloses "wherein step (a) includes defining and storing a schema for said plurality of components, said schema being a set of classes that captures all of the information in said file-based data" (see col. 7, lines 10-20).

As per claim 9, Kiriara discloses "(c) retrieving said schema whenever said components are retrieved from said store" (see col. 3, lines 51-57).



As per claim 10, Kiriara discloses "wherein said schema defines at least one of a class for each element type, and a plurality of classes for said file-based data" (see col. 7, lines 10-20).

As per claim 11, Kiriara discloses "wherein said schema is associated with a type of file selected from the group consisting of a DGN file, a DWG file and a STEP file" (i.e., distributed data CAD system relates to parts shape files in which parts shape information is stored are distributed; col. 3, lines 31-46).

As per claim 12, Kiriara discloses "wherein each component has (i) unique identifier, (ii) a set of fields, each field having a data type and a data value, and (iii) a program which interprets and modifies said fields" (i.e., table construction information table provides information regarding each individual part; see col. 4, lines 11-15), and "step (b) includes storing items (i)-(iii) for each component" (see col. 4, lines 26-30).

As per claim 13, Kiriara discloses "wherein at least some of said components further have (iv) a list of other dependent components" (i.e., parts information table and construction information table dependent of each other; see col. 5, lines 2-3), and "step (b) further includes storing said list for such components" (see col. 4, lines 26-30).

As per claim 14, Kiriara discloses "wherein at least some of said components further have (IV) an access control value, and step (b) further includes storing said access control values for such components" (i.e., the identifier of the parts (control

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value) and the storing destinations of the construction information of those parts are also made correspond to each other, in which construction information can be also obtained (access, retrieve) from the identifiers of the parts without being aware of the location of the parts; see col. 2, lines 44-52).

As per claim 16, As per claim 7, in addition to claim 1, Kiri-hara further discloses "(d) storing and saving a mapping between said tag for each tagged file element and its component identifier" (see col. 2, lines 29-43).

As per claim 21, Kiri-hara discloses "an apparatus, wherein the physical-file-based data includes a physical file having a plurality of file elements" (i.e., parts construction table contains a parts number field and a physical path name field; see Fig. 10, col. 7, lines 10-20), said apparatus comprising:

(a) "a translator that represents physical-file-based data as a plurality of individual components, each individual component having (i) a unique identifier (i.e., identifiers to uniquely identify the parts are made correspond to each other; see col. 2, lines 29-37), (ii) "a set of fields" (i.e., parts shape data is stored into a plurality of distributed files; see col. 6, lines 24-25), "each field having a data type and a data value" (i.e., parts information tables are the information (data type or value) provided for each part; see col. 4, lines 9-16), and (iii) "a program which interprets" (i.e., executing commands; see col. 5, lines 39-40) and

(b) "a memory for storing said individual components in a store" (i.e., stored into the distributed parts file of each client; see cot. 4, lines 26-30). Kiriara fails to explicitly disclose modifying said field; and managing physical-file-based data adapted to be manipulated by at least one user via a file-based computerized editor; and wherein said individual components are adapted to be manipulated by a transaction-based computerized editor. However, AAPA discloses traditional file-oriented programs are very efficient viewing and editing tools and are well known by many users (see AAPA page 4, paragraph [0009]) and various products have been developed to transcend the file-oriented model, while still allowing traditional tools to be applied at the viewing and editing stage (see AAPA page 5, paragraph [0011]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Kiriara with AAPA with modifies said field; managing physical-file-based data adapted to be manipulated by at least one user via a file-based computerized editor; and wherein said individual components are adapted to be manipulated by a transaction-based computerized editor. Such a modification would allow the teachings of Kiriara and AAPA to provide a management tool for tracking and managing multiple simultaneous changes to a project data set in a cohesive, secure, identifiable, and reversible way, and interfaces for importing data from, and for making changes to, the project data set with file-oriented tools such as CAD programs (see AAPA page 1, paragraph [0002]).

As per claim 22, Kiriara discloses "wherein at least some of said individual components further have (iv) a list of other dependent components, said memory further storing such lists" (i.e., parts shape files in which parts shape information is stored are distributed and a parts construction file in which parts construction information is concentratedly and managing; col. 3, lines 31-46).

As per claim 23, Kiriara discloses "wherein at least some of said individual components further have (iv) an access control value, said memory further storing such values" (i.e., the identifier of the parts (control value) and the storing destinations of the construction information of those parts are also made correspond to each other, in which construction information can be also obtained (access, retrieve) from the identifiers of the parts without being aware of the location of the parts; see col. 2, lines 44-52).

As per claim 24, Kiriara discloses "wherein each element is represented by a component" (i.e., each element represents part shape; see col. 6, lines 29-30).

6. Claims 6, 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,339,247 issued to Kiriara et al., ("kiriara") and Applicant(s) Admitted Prior Art ("AAPA"); Specification pages 2-6 up to paragraph [0013] as applied to claims 1-5, 8-16 and 21-24 above, and further in view of U.S. Patent No. 4,714,992 issued to Gladney et al., ("Gladney").

As per claim 6, in addition to claim 1, Kiriara fails to explicitly disclose latest version of the individual components and (ii) information to fully document changes made to each version of each individual component during each of said plurality of successive sessions, wherein said changes comprise additions, modifications and deletions. However, AAPA discloses workflows involving of multiple participants simultaneously making changes (updating, modification, addition and deleting) to related information (see AAPA page 2, paragraph [0003]). Version managements are well Known in the art one ordinary skill in the art desiring to track the different versions the correspondent of the components of Kiriara and AAPA would have been turned to Gladney for this teaching (see Gladney Fig. 1, col. 4, lines 26-40), and see also col. 14, lines 20-32. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Kiriara and AAPA with latest version of the individual components as taught by Gladney in order to fully document changes made to each version of each individual component during each of said plurality of successive sessions, wherein said changes comprise additions, modifications and deletions. Such a modification would allow to the teachings of Kiriara and AAPA to provide a management tool for tracking and managing multiple simultaneous changes to a project data set in a cohesive, secure, identifiable, and reversible way, and interfaces for importing data from, and for making changes to, the project data set with file-oriented tools such as CAD programs (see AAPA page 1, paragraph [0002]).

As per claim 7, in addition to claim 1, Kiriara fails to explicitly disclose (d) using said information stored in step (b) (ii) to view successive versions of any individual changed component; and (e) using the information stored in step (b) (ii) to view a plurality of changed components. However, AAPA discloses workflows involving of multiple participants simultaneously making changes (updating, modification, addition and deleting) to related information (see AAPA page 2, paragraph [0003]). Version managements are well Known in the art one ordinary skill in the art desiring to track the different versions the correspondent of the components of Kiriara and AAPA would have been turned to Gladney for this teaching (see Gladney Fig. 1, col. 4, lines 26-40), and see also col. 14, lines 20-32. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Kiriara and AAPA with Gladney in order (ii) to view successive versions of any individual changed component; and (e) using the information stored in step (b) (ii) to view a plurality of changed components. Such a modification would allow to the teachings of Kiriara and AAPA to provide a management tool for tracking and managing multiple simultaneous changes to a project data set in a cohesive, secure, identifiable, and reversible way, and interfaces for importing data from, and for making changes to, the project data set with file-oriented tools such as CAD programs (see AAPA page 1, paragraph [0002]).

As per claim 15, Kiriara substantially discloses the invention as claimed except wherein step (a) includes mapping at least some of said plurality of elements to

respective single components. However, Gladney discloses a version management system and propagating source data changes in conjunction with a system for mapping from source data objects to responses (see Gladney col. 14, lines 20-28). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Kiriara and AAPA with Gladney in order to include mapping at least some of said plurality of elements to respective single components. Such a modification would allow to the teachings of Kiriara and AAPA and Gladney to provide consistency of views (see Gladney col. 2, lines 44-45).

### ***Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Voll et al., U.S. Patent No. 5,551,028 relates to data management systems for computers.

Van Huben et al., U.S. Patent No. 5,950,201 relates to data management control system.

Van Huben et al., U.S. Patent No. 6,088,693 relates to method for concurrent engineering.

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### CONTACT INFORMATION

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 - 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 - 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

August 08, 2005